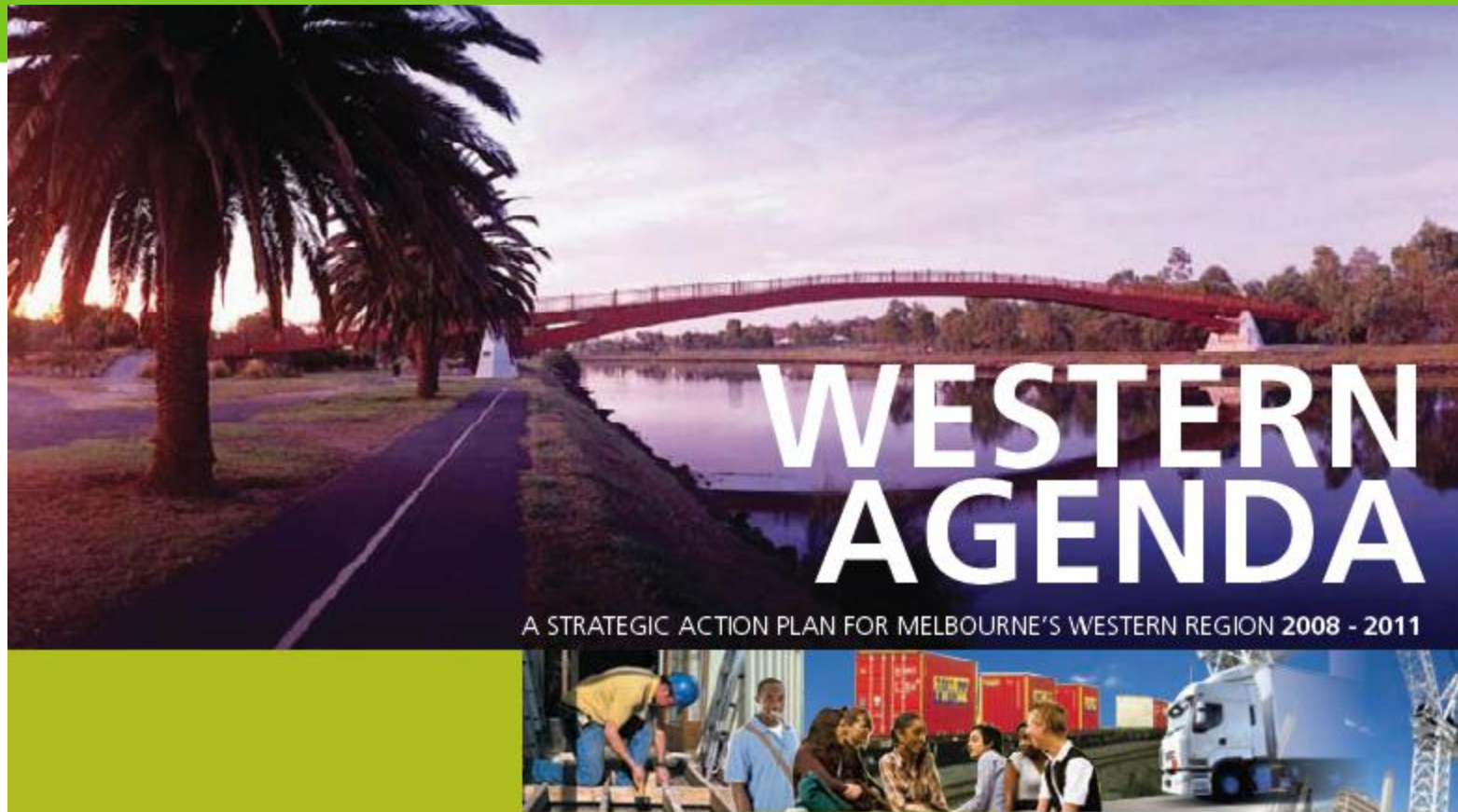


It's growth, educators: Know thy impact



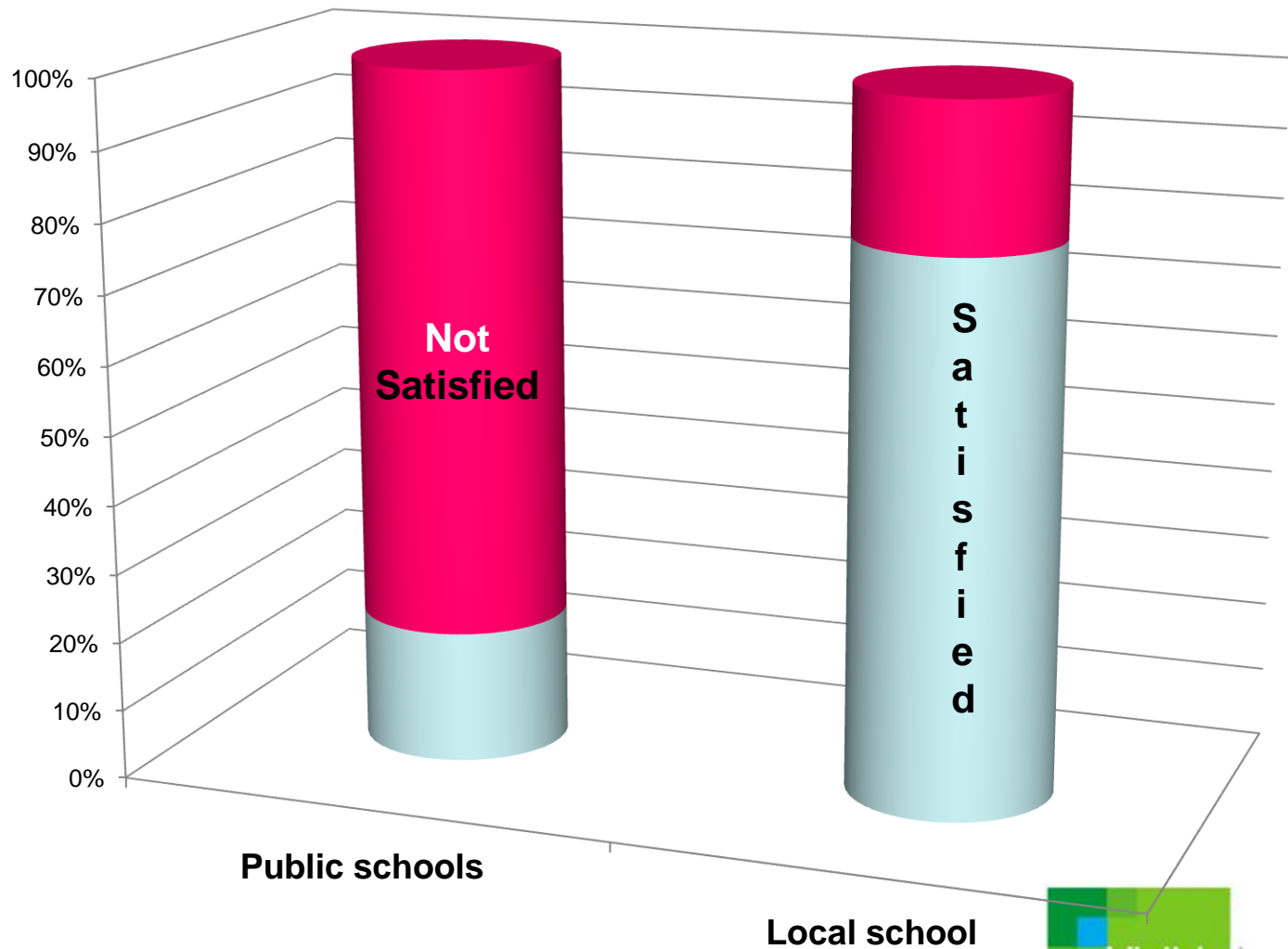
November 2011



1.

# The dilemmas of democracy and school leadership.

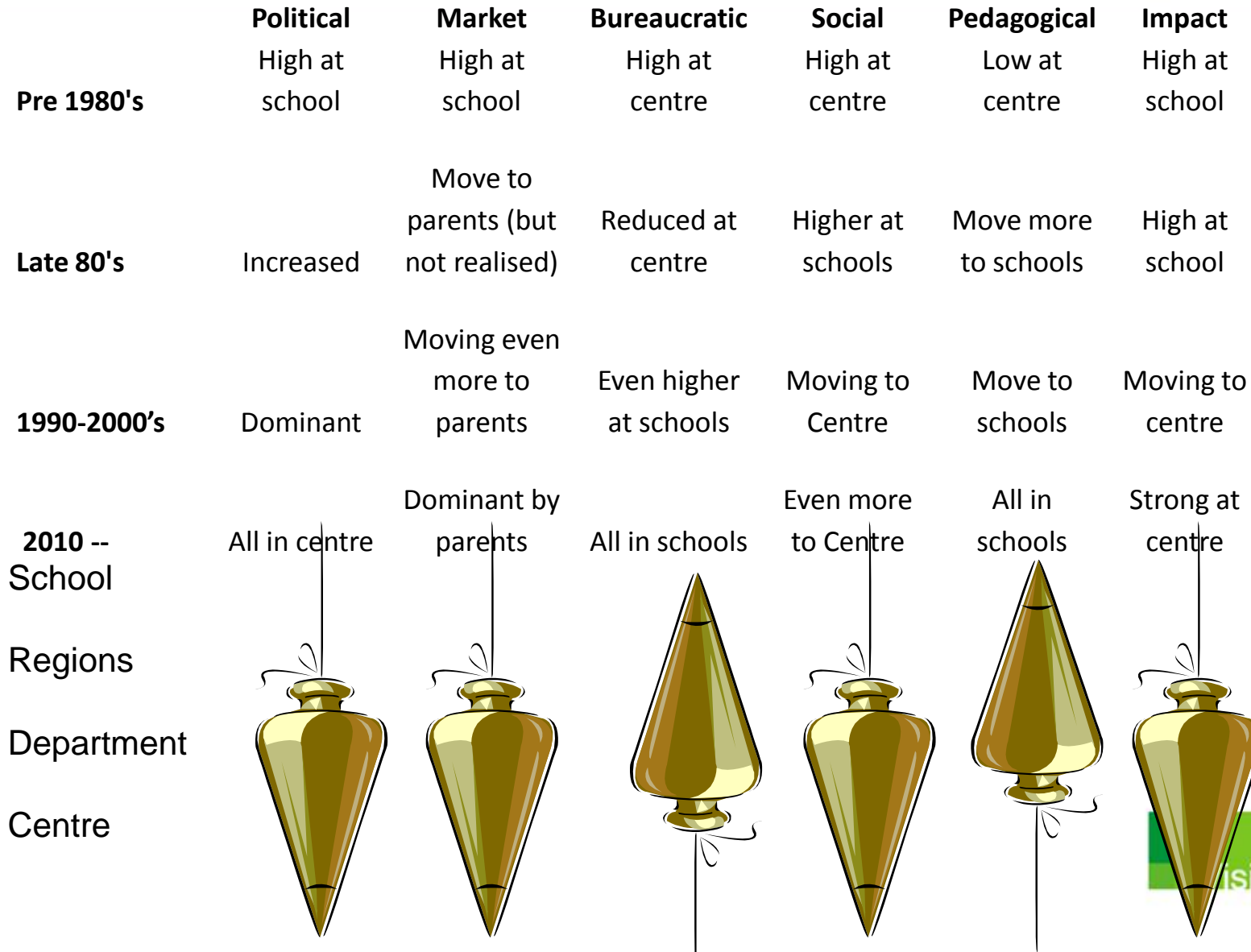
## Public Perceptions of Schools



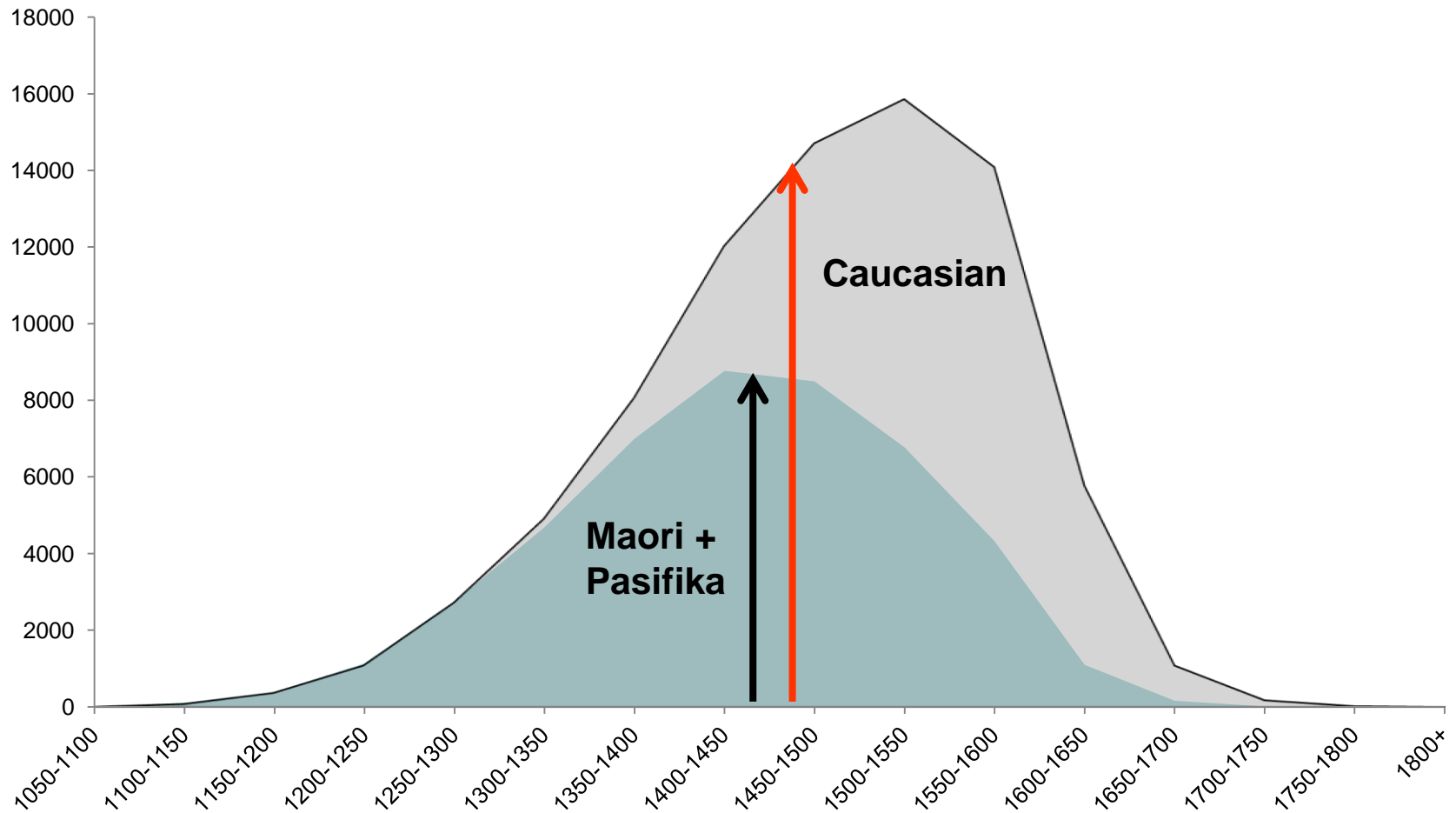
# Democracy ...

**“A democracy cannot exist as a permanent form of government. It can only exist until the voters discover that they can vote themselves largesse from the public treasury. From that point on, the majority always votes for the candidates promising the most benefits from the public treasury, with the result that a democracy always collapses over loose fiscal policy, always followed by a dictatorship” Alexander Tytler (1834).**

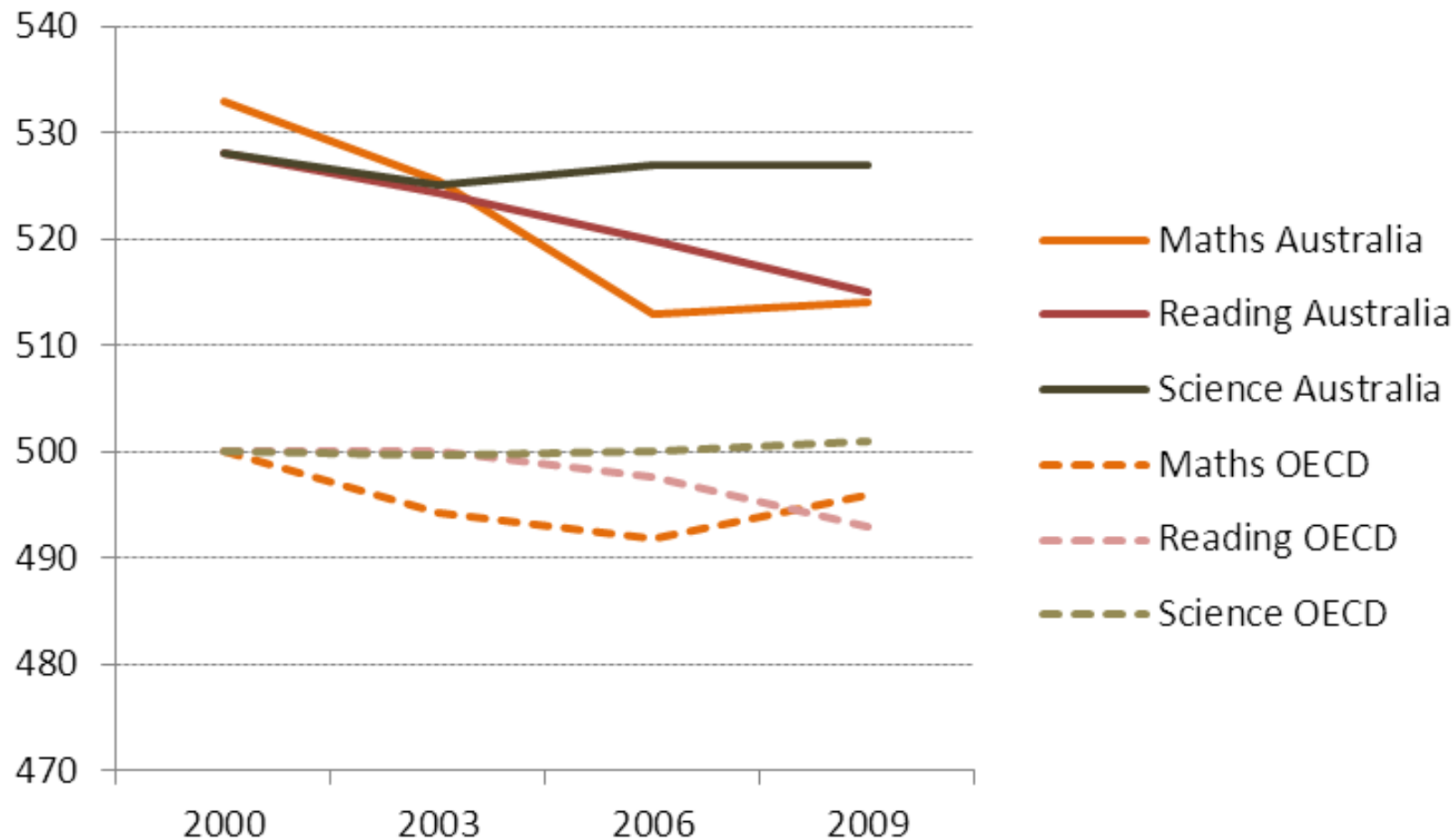
# The pendulum swings in educational leadership



# Reading distribution (N=126,424)



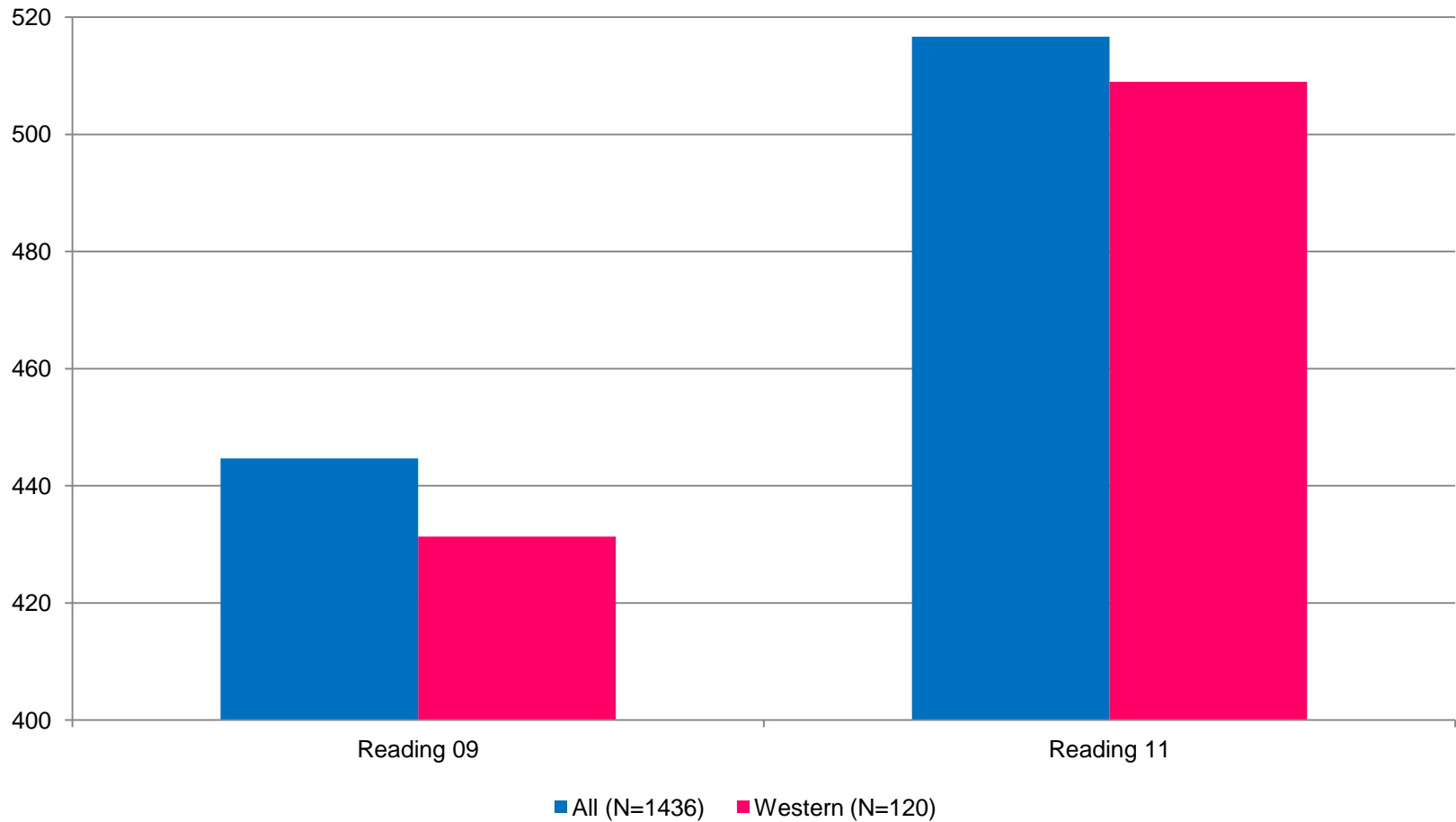
# AUSTRALIA'S performance over time



# So to the Western Region

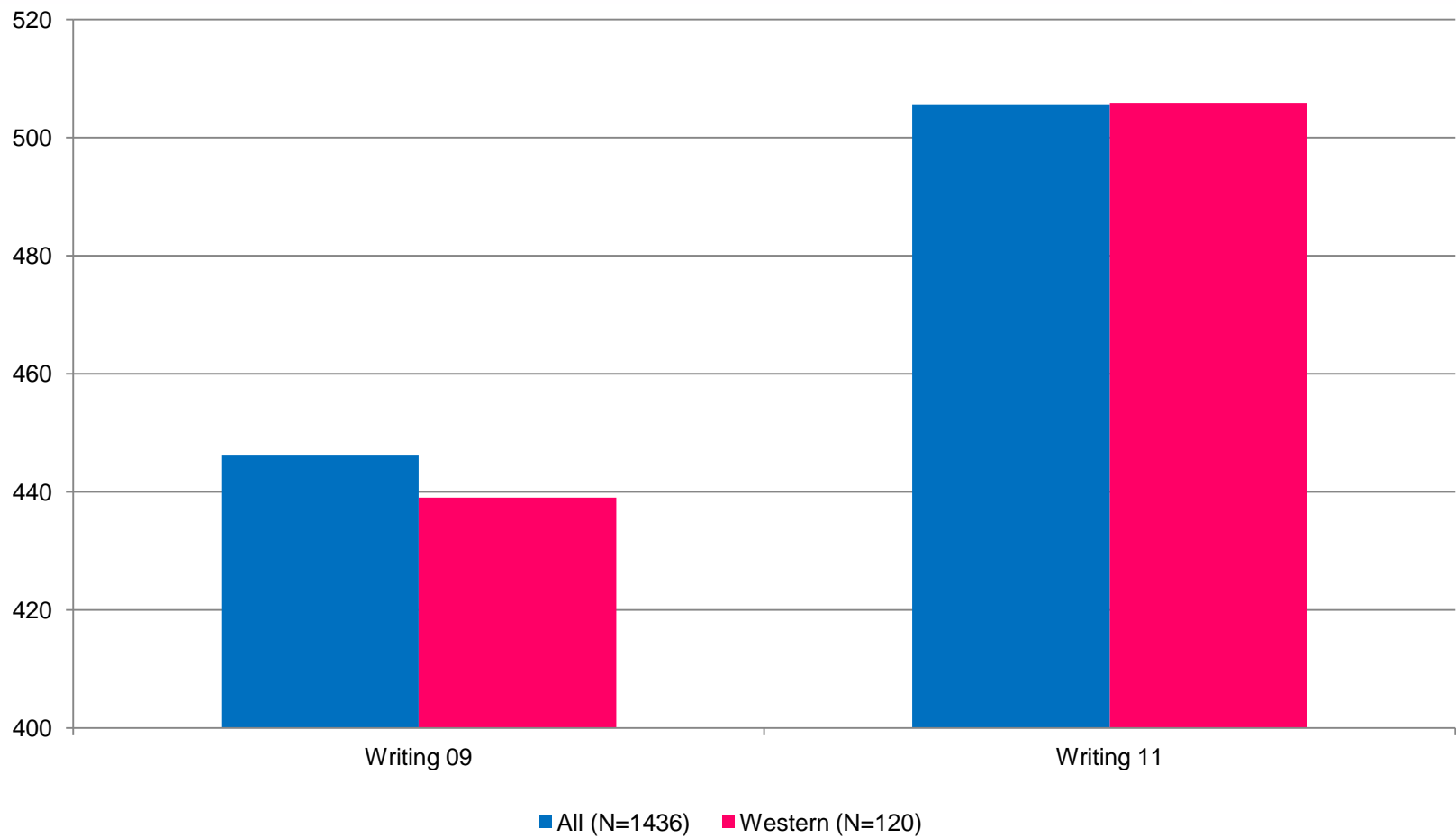
- There are 1574 schools in Victoria and 177 in Western Region
  - About 600,000 people in the West
  - Growing twice as fast as rest of Melbourne
  - 70% attain Yr 12 qualifications
  - 40% to University (compared to 44% for Melbourne)
- We know that the AVERAGE performance in Western is lower than for the rest of Victoria

# Reading

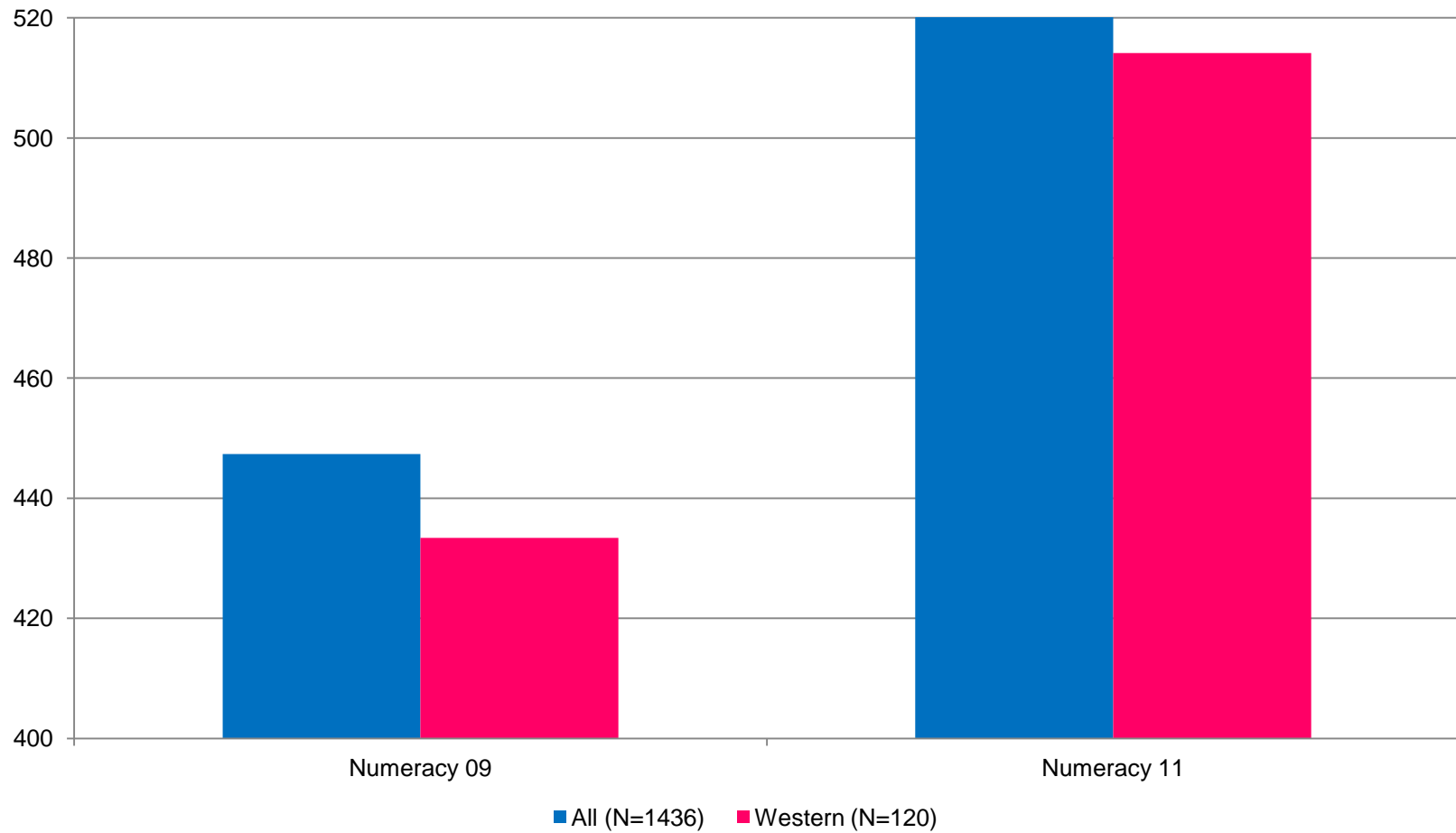




# Writing



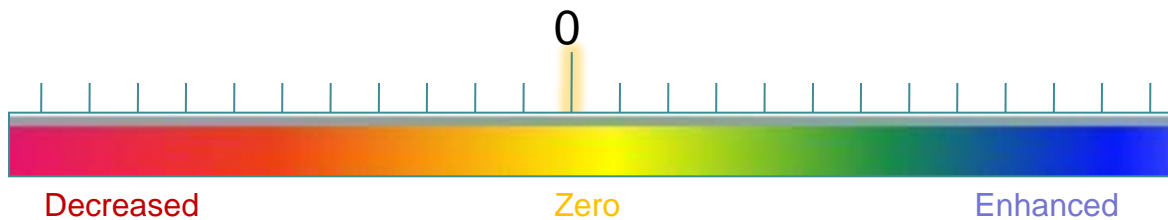
# Numeracy



# GROWTH

- But what about the growth
  - Restriction – year not cohort gains
- First – let us set some expectations
  - Synthesis of meta-analyses
  - NAPLAN across Oz 2007+

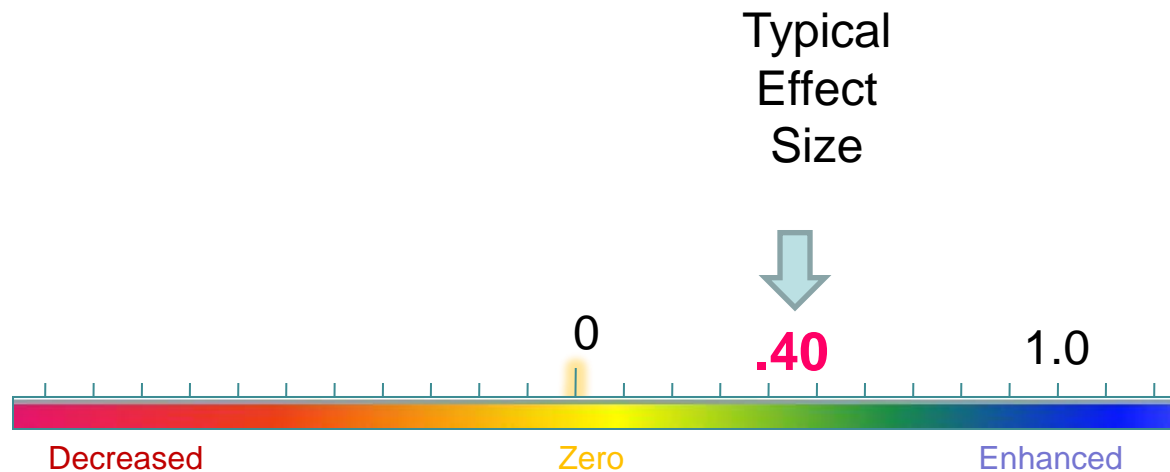
# Concept of effect-sizes



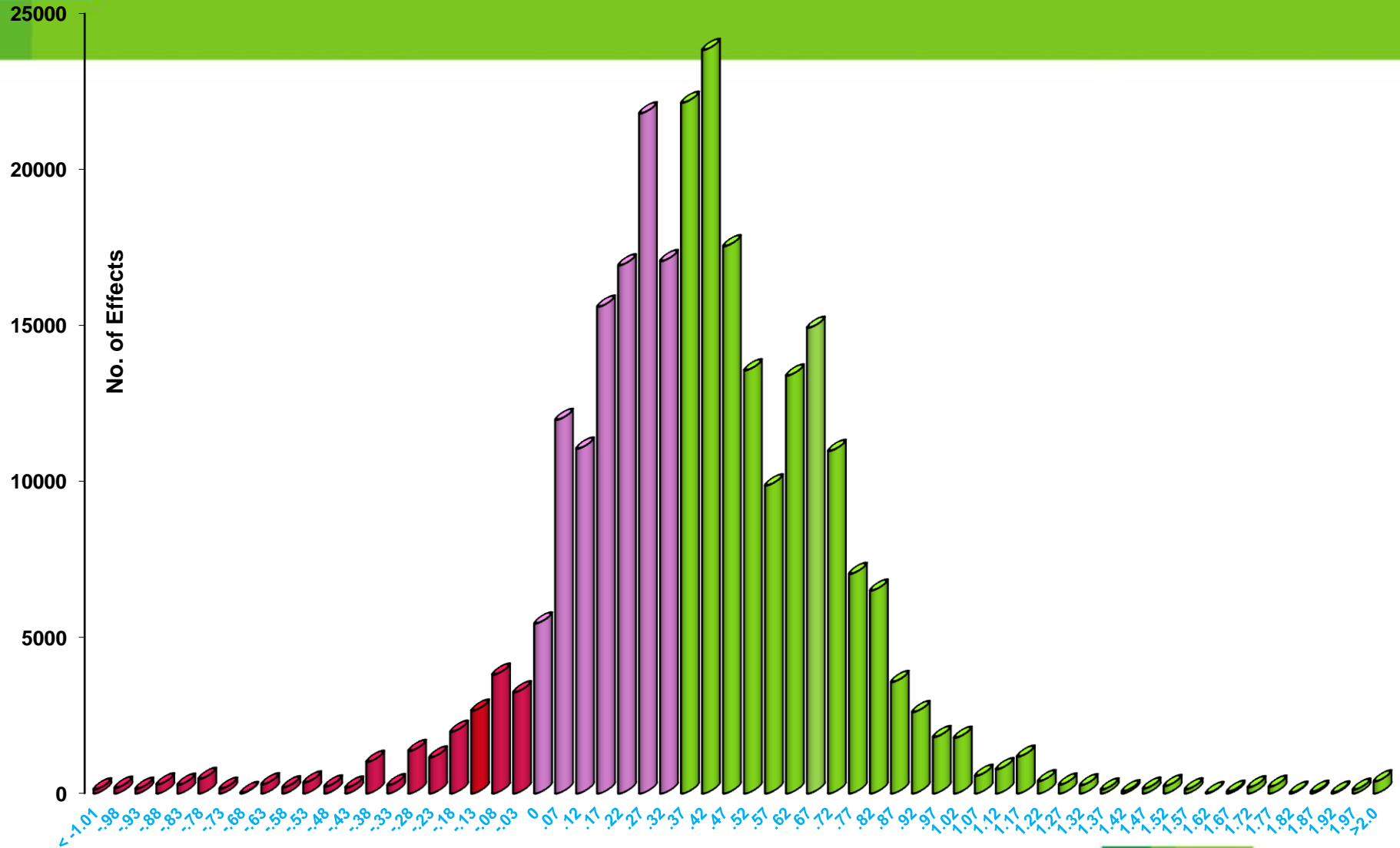
# The typical influence on achievement

- **900+ meta-analysis**
- **55,000 studies, and**
- **240+ million students**

# Effect on Achievement over time?



# Distribution of effects



# No effects of interest...

Rank	Influence	Studies	Effects	ES
86	Inquiry based teaching	205	420	.31
103	Individualized instruction	638	1185	.22
106	Class size	96	785	.21
122	Ability grouping/Streaming	500	1369	.12
123	Gender	2926	6051	.12
136	Retention (holding back a year)	207	2675	-.16
137	Television	37	540	-.18
138	Mobility (moving between schools)	181	540	-.34



# Average effects

Rank	Influence	Studies	Effects	ES
24	Study skills	668	2217	.59
43	Outdoor/ Adventure Programs	187	429	.52
46	Play Programs	70	70	.50
47	Second/Third chance programs	52	1395	.50
52	Early Intervention	1704	9369	.47
54	Pre school programs	358	1822	.45
57	Teacher Expectations	674	784	.43

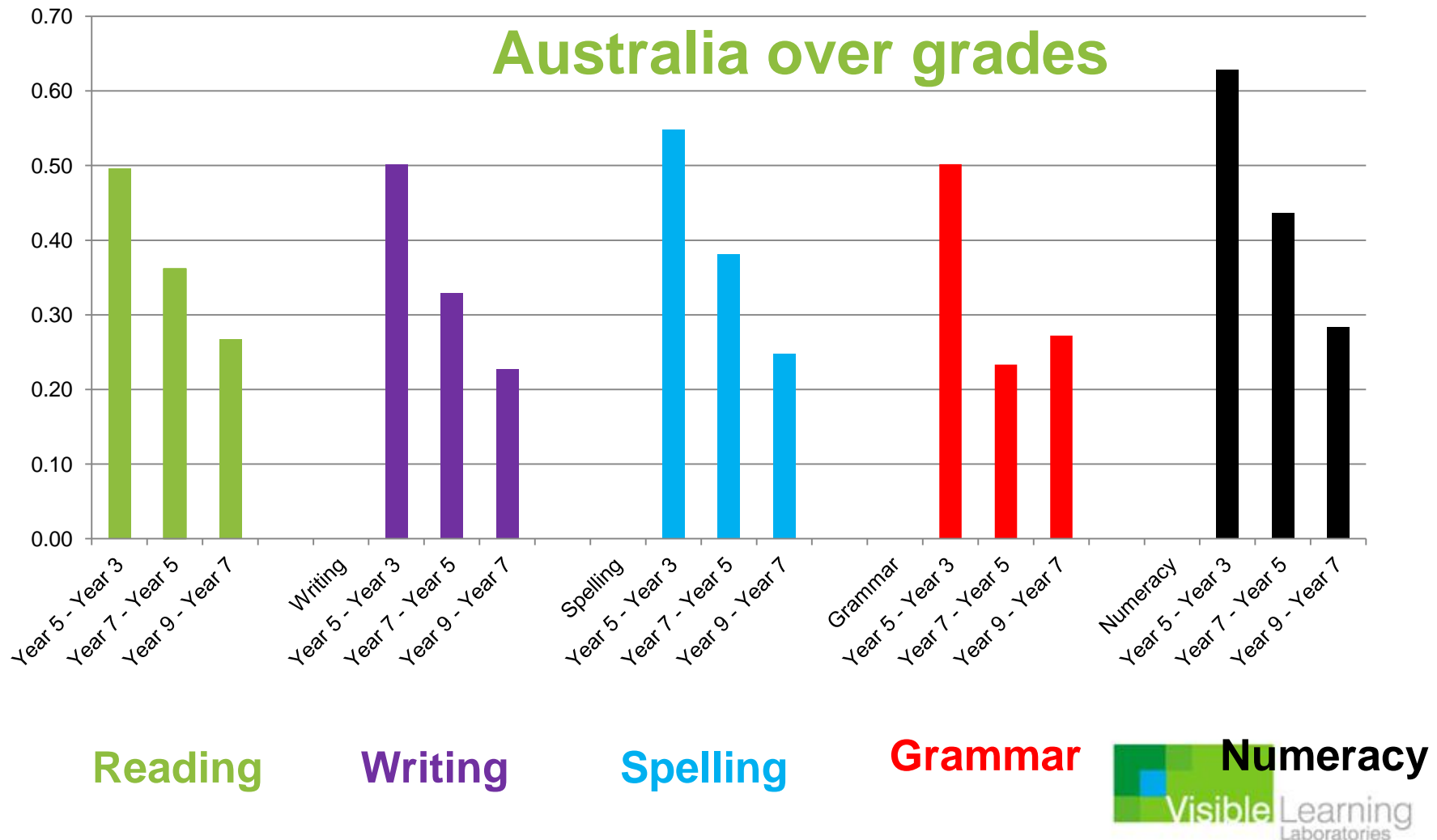
# The winners....

Rank	Influence	Studies	Effect s	ES
1	Student expectations	209	305	1.44
3	Response to intervention	13	107	1.07
4	Teacher credibility	51	51	.90
5	Providing formative evaluation	30	78	.90
7	Classroom discussion	42	42	.82
9	Teacher clarity	na	na	.75
10	Feedback	1310	2086	.75
11	Reciprocal teaching	38	53	.74
11	Teacher-Student relationships	229	1450	.72

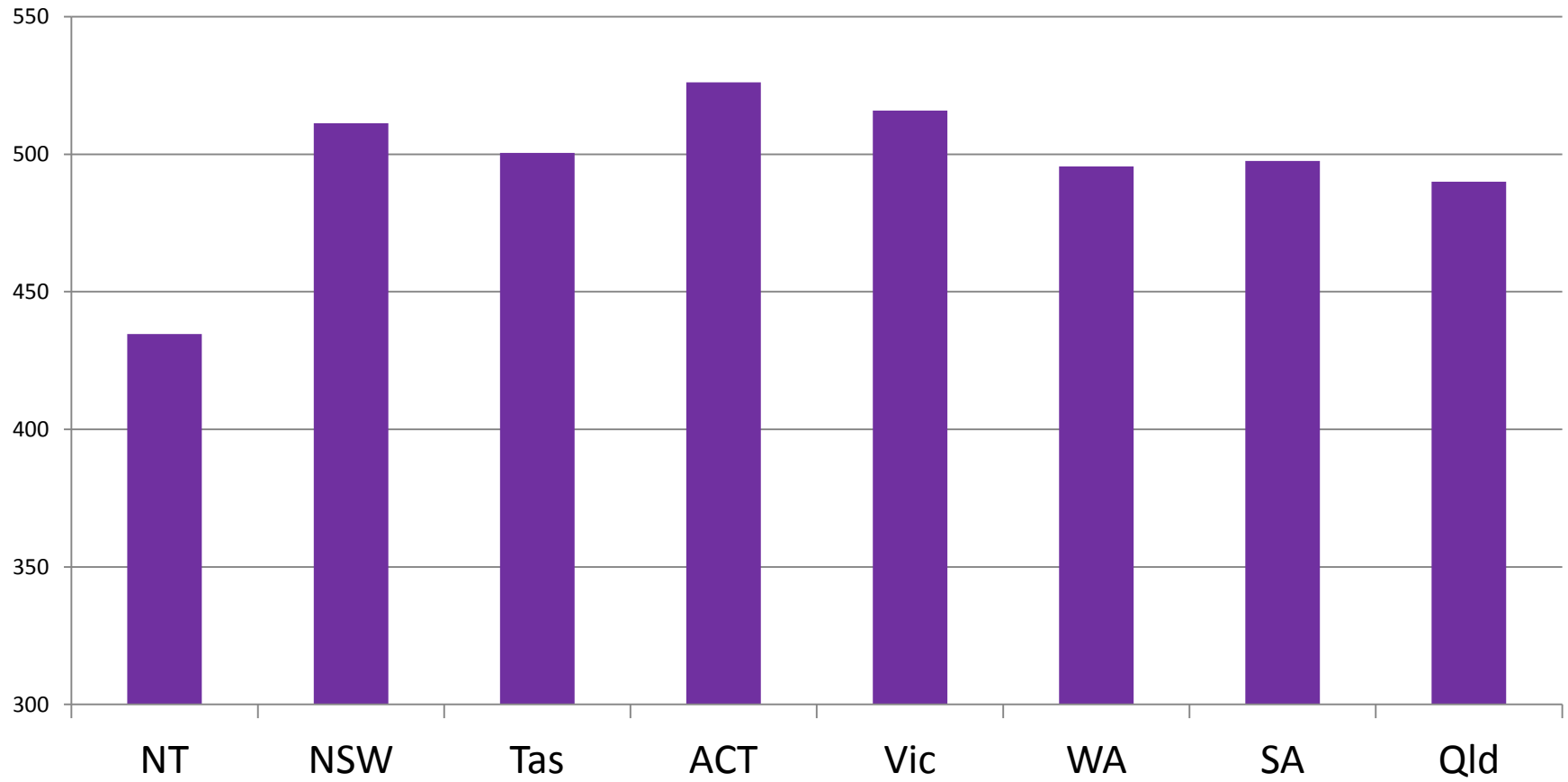
# Naplan

# Growth over time ALL = .40

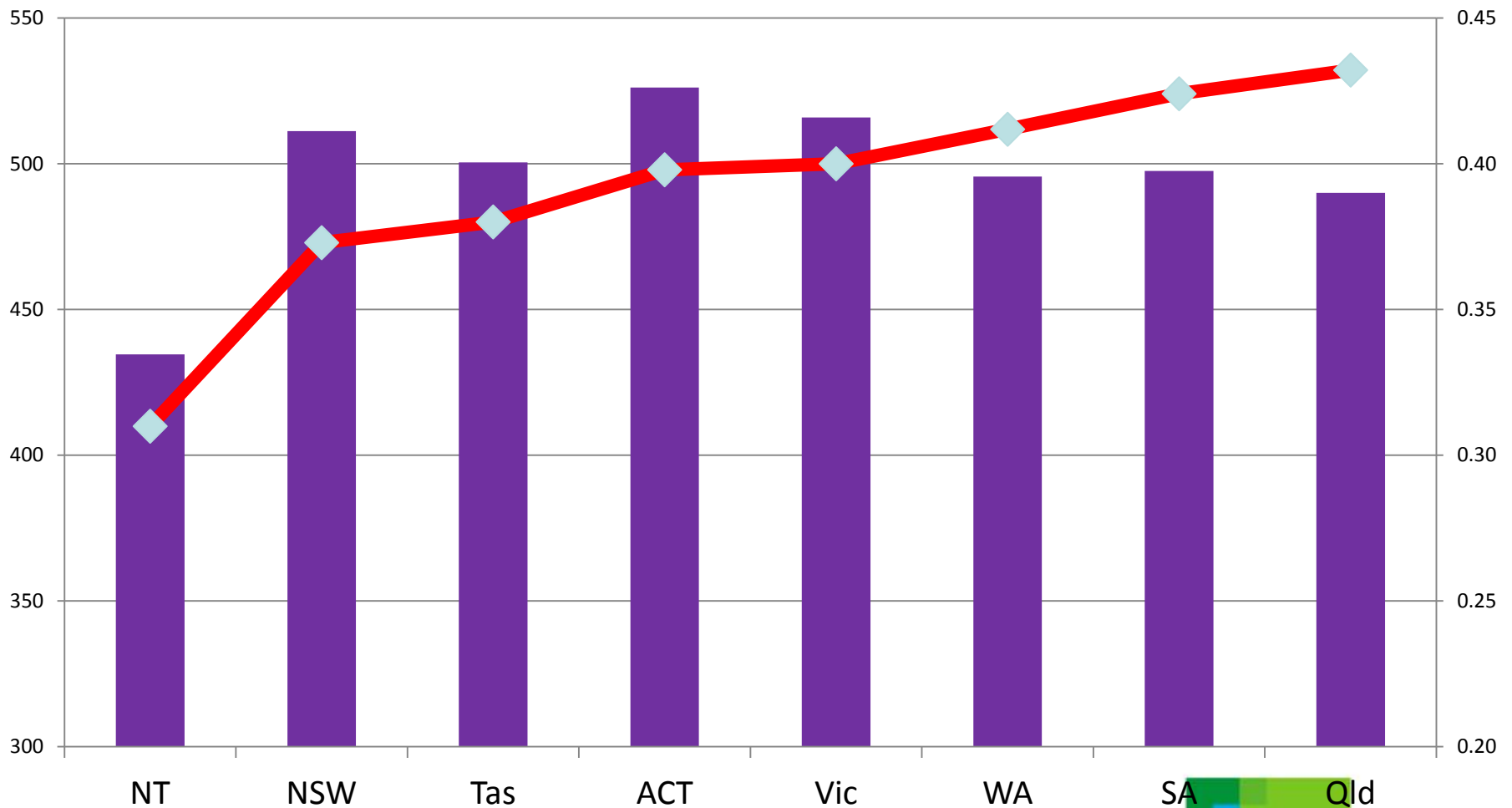
*Year 3-5 = .54    Year 5-7 = .35    Year 7-9 = .26*



Average across all Five NAPLAN subjects



## Average (purple) and Growth (red)

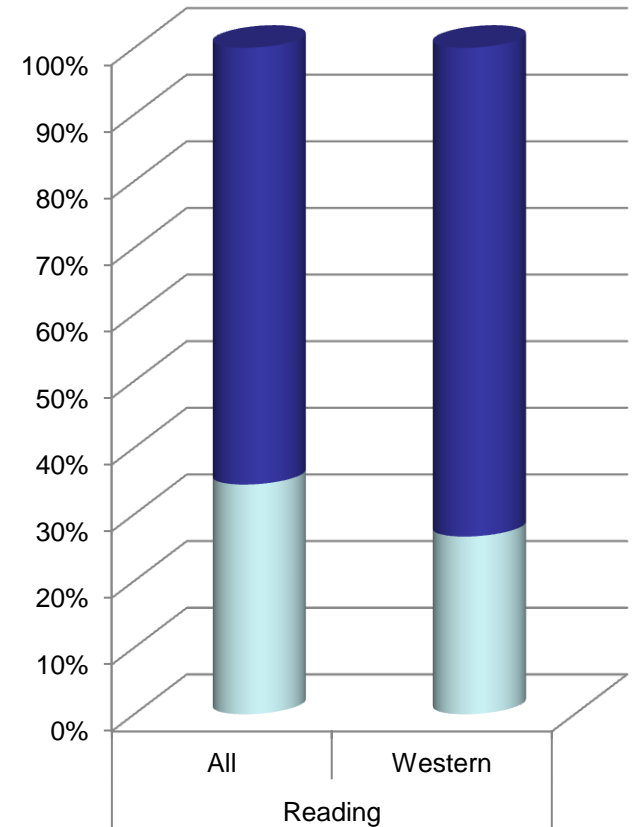
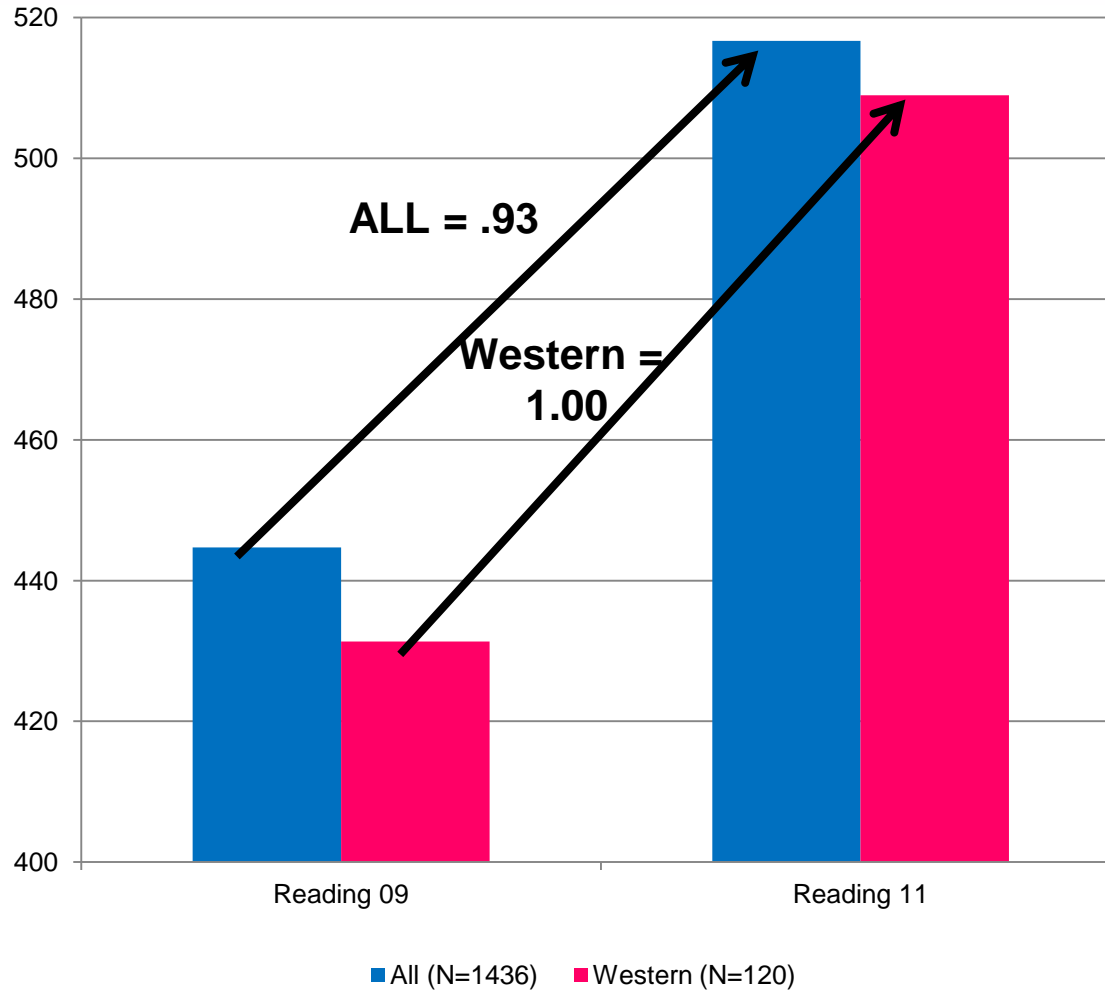


The scene is set

We can expect **.4 per year**

Or **.8 over two years**

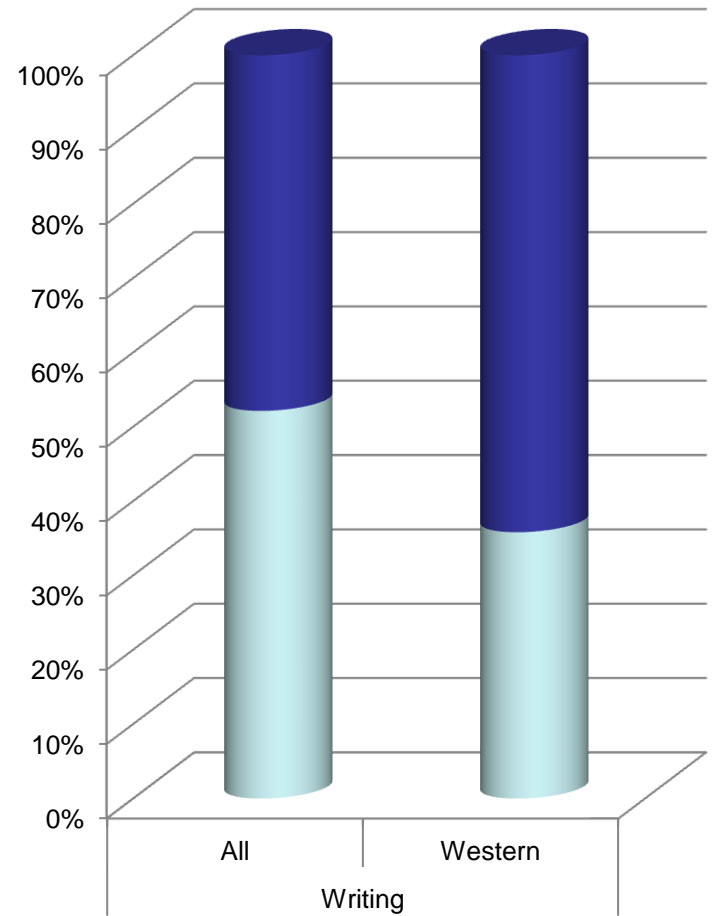
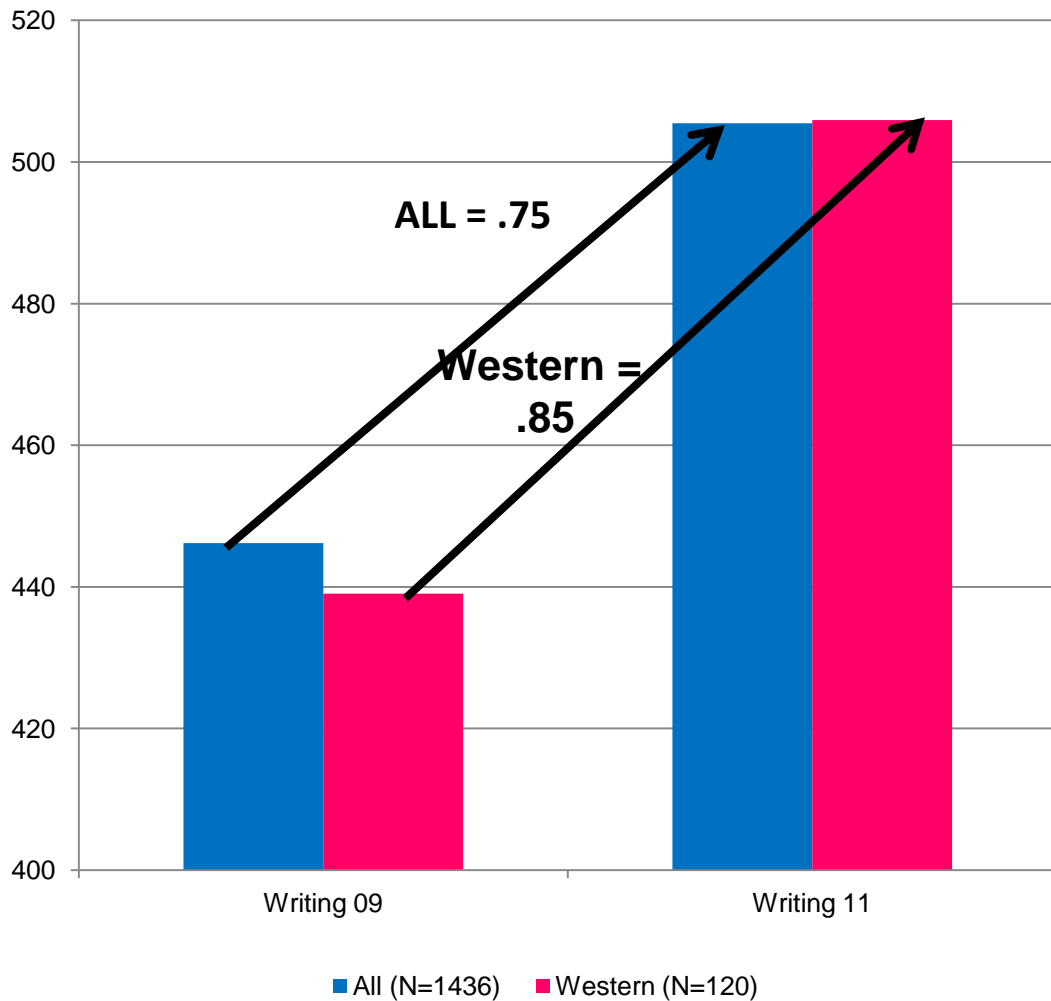
# Reading



Above and Below  
expected .80

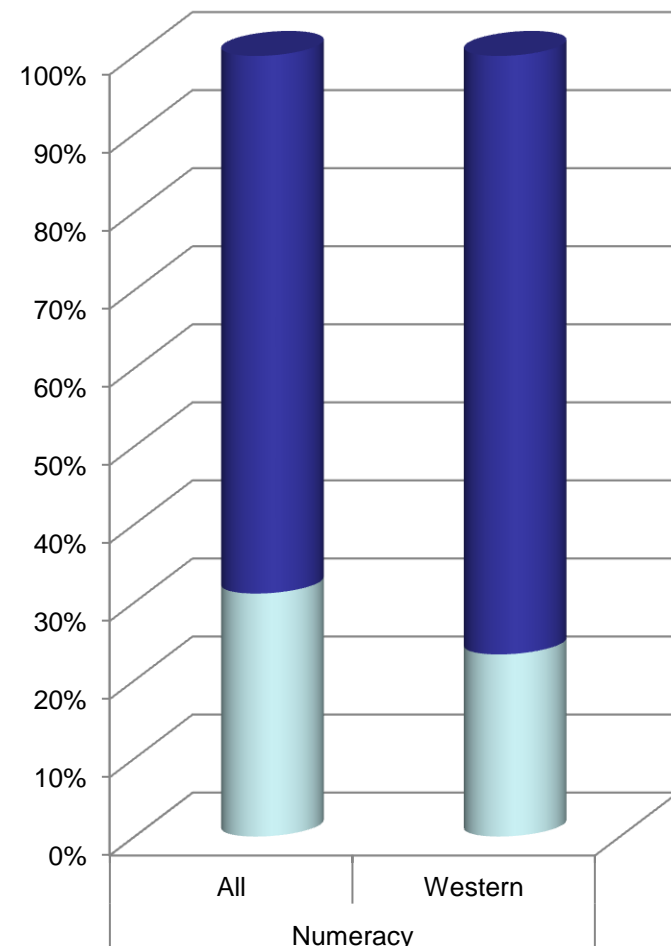
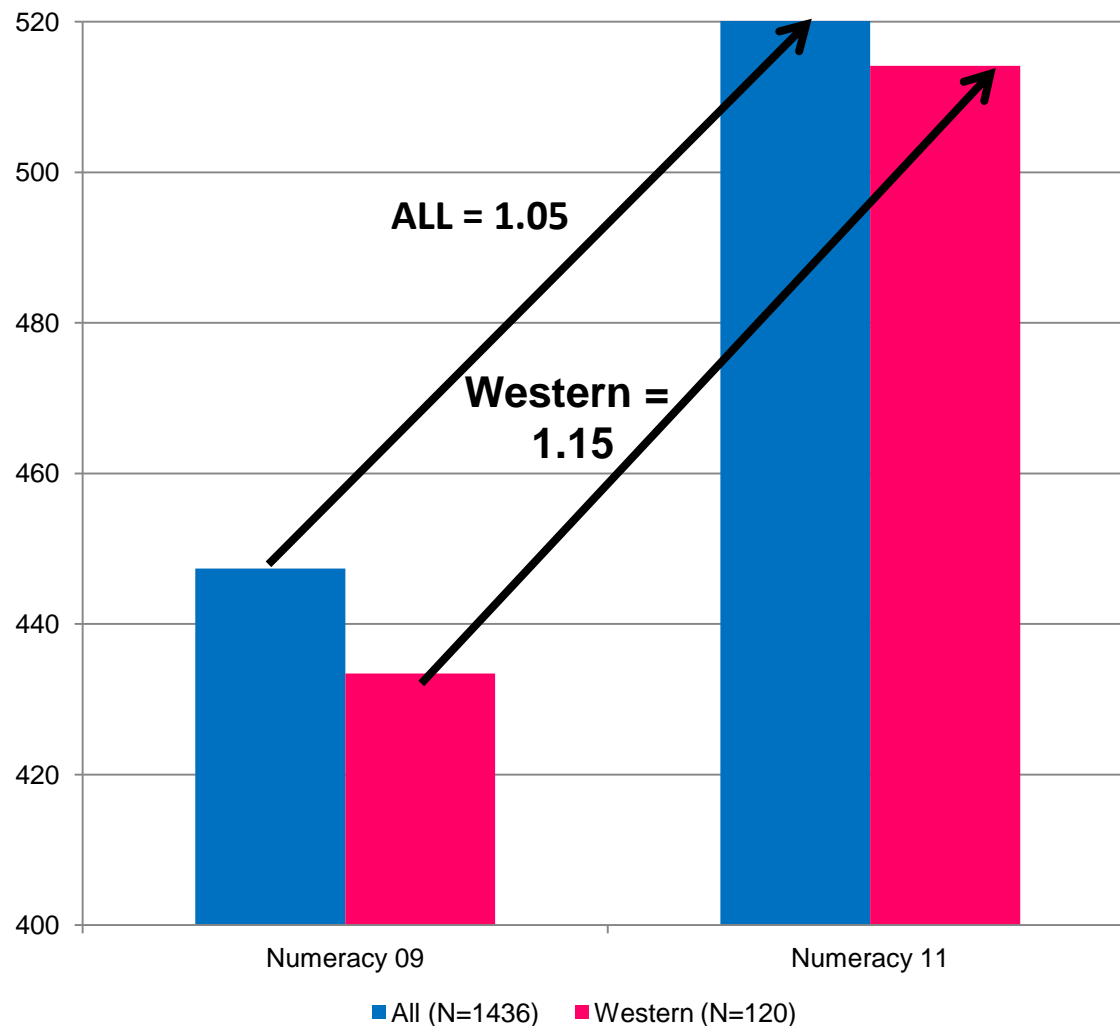


# Writing



Above and Below  
expected .80

# Numeracy



Above and Below  
expected .80

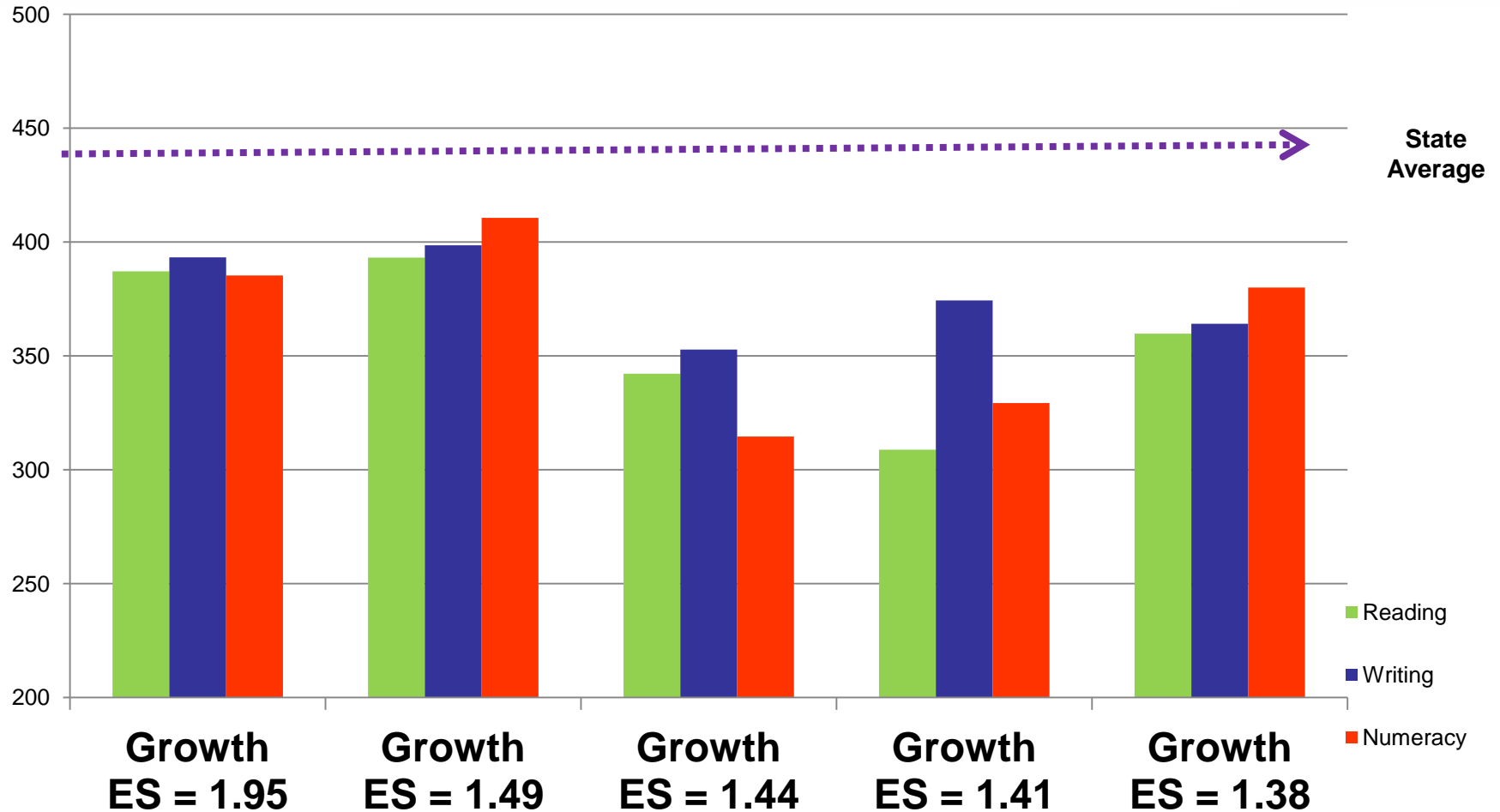
# Some schools

	Reading Growth ES	Writing Growth ES	Numeracy Growth ES	Average Growth ES
All Victoria				
1	-.50	-.39	-.22	-.37
2	.25	.19	-.64	-.07
3	-.08	.36	-.21	.02
4	-.08	.46	-.25	.04
5	-.31	.00	.57	.09
Western Region				
1	.43	-.12	.56	.29
2	.40	.24	.50	.38
3	.59	.07	.51	.39
4	.56	.11	.53	.40
5	.51	.19	.50	.40

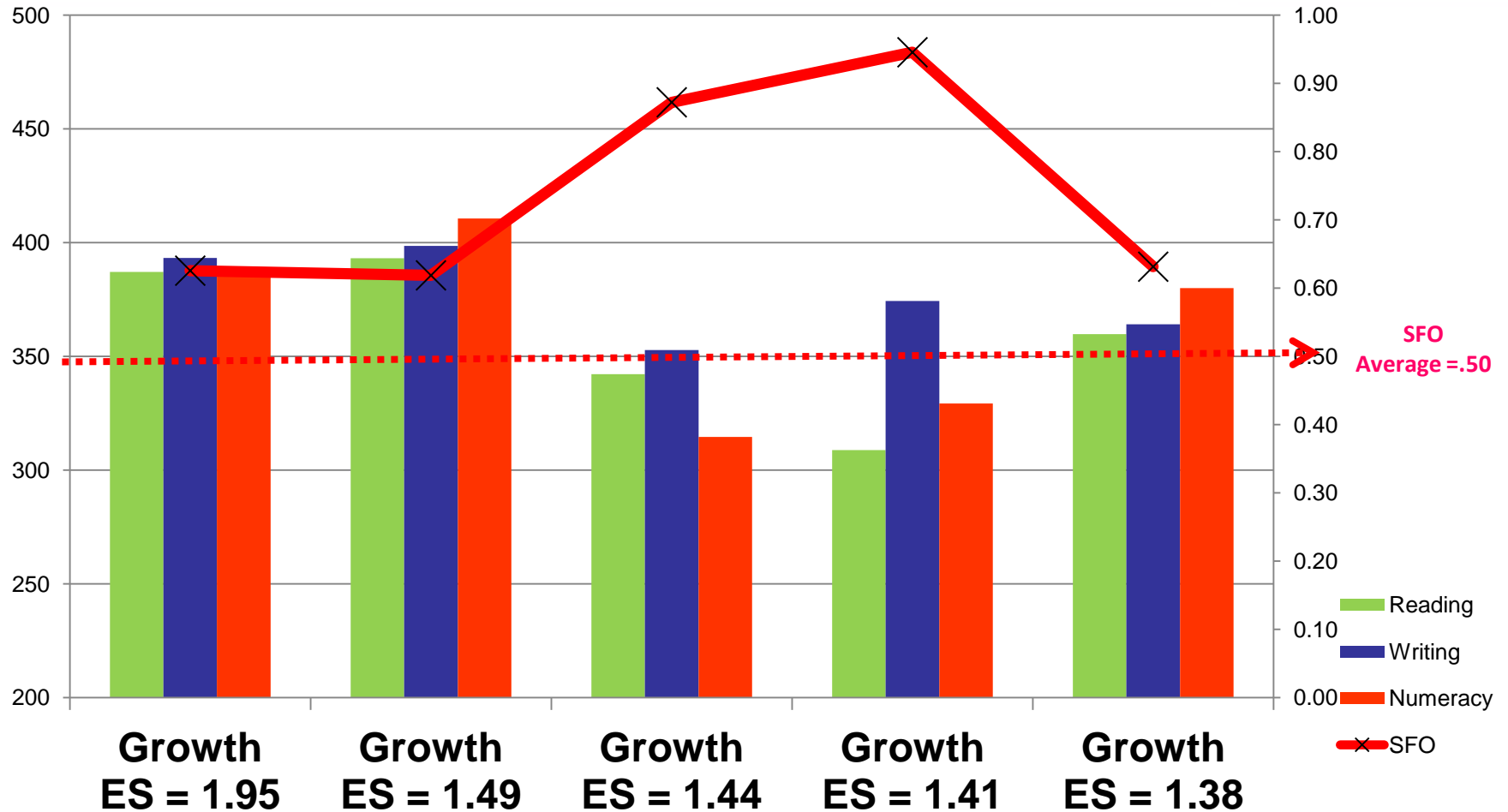
# Great Growth Schools

	Reading Growth ES	Writing Growth ES	Numeracy Growth ES	Average Growth ES
All Victoria				
1	2.35	1.60	2.79	2.24
2	1.57	1.93	2.67	2.06
3	2.42	1.29	2.36	2.02
4	2.07	1.50	2.39	1.98
5	1.80	1.25	2.56	1.87
Western Region				
1	2.05	1.40	2.40	1.95
2	1.52	1.26	1.69	1.49
3	1.37	1.23	1.71	1.44
4	1.48	1.36	1.38	1.41
5	1.34	1.21	1.58	1.38

# The Five High Growth Western Schools

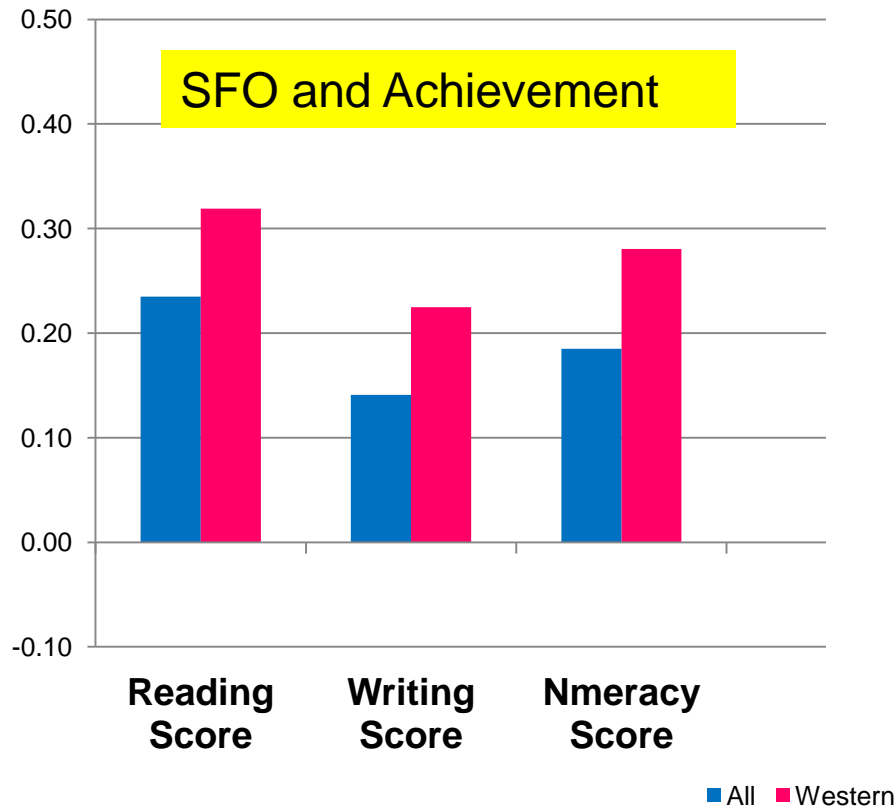


# The Five High Growth Western Schools

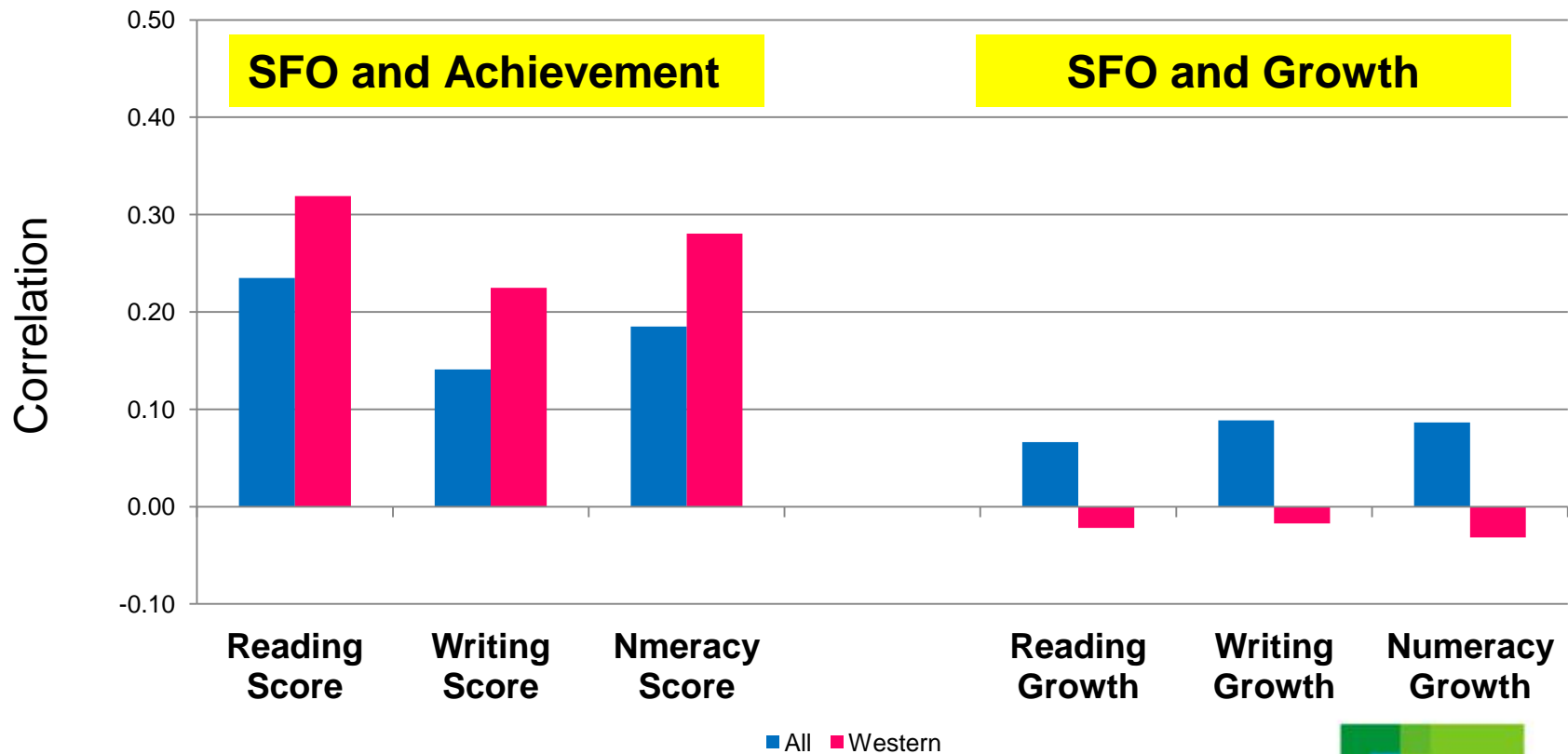


# Relation to SES

- It is the case that there is a positive correlation between Achievement score and SFO



- But no relation between SES and Growth





# Calculating PROGRESS effect-sizes

Student	February test	June test
David	460	455
Eeofa	445	450
Anne	425	432
Barry	432	440
Hemi	420	430
Juliet	463	475
Corrin	435	448
Karmo	480	500
Fred	450	475
Ginnie	425	455
Average:	444	456
Spread	20	22
Ave spread	Ave of 20 + 22	21
Effect size	$(456-444) / 21$	<b>0.60</b>

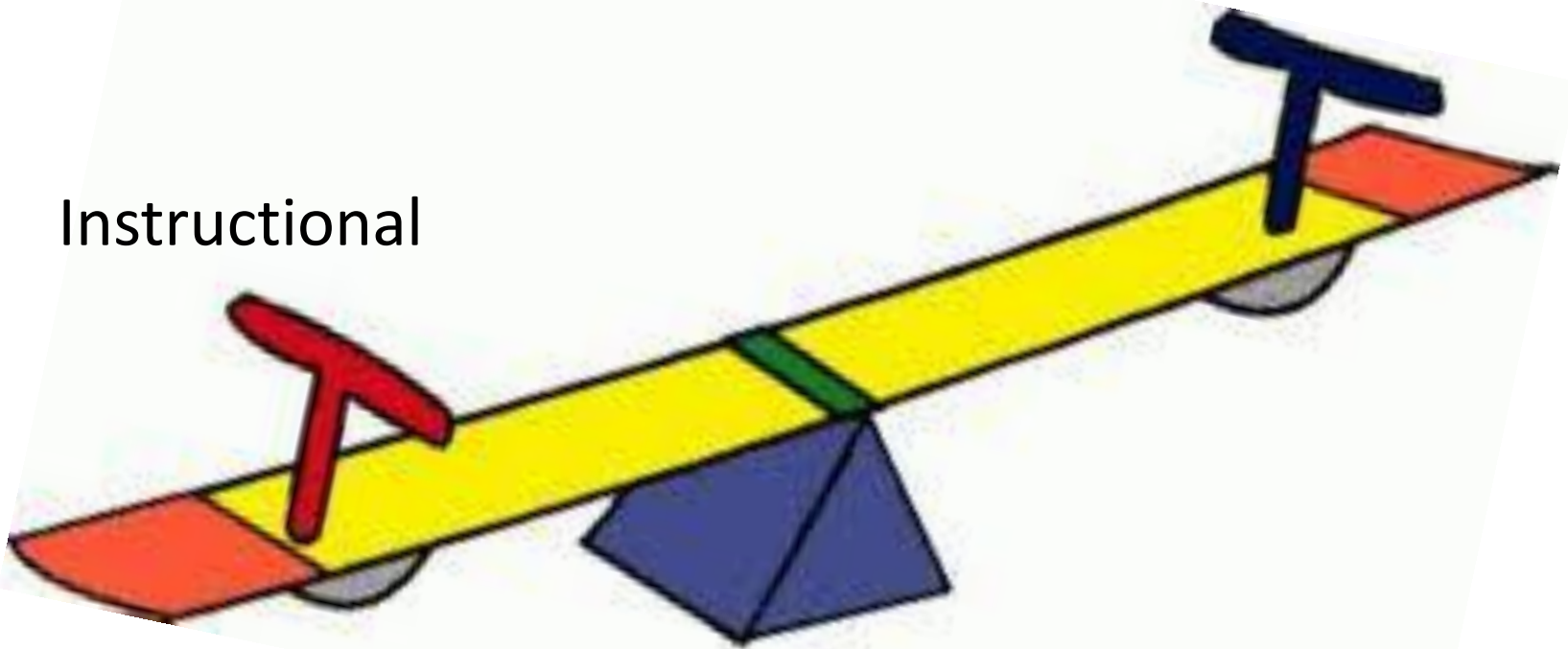
# Calculating PROGRESS effect-sizes

Student	February test	June test	Individual Growth Effects
David	460	455	-0.28
Eeofa	445	450	0.28
Anne	425	432	0.39
Barry	432	440	0.44
Hemi	420	430	0.56
Juliet	463	475	0.67
Corrin	435	448	0.72
Karmo	480	500	1.11
Fred	450	475	1.39
Ginnie	425	455	1.67
Average:	444	456	
Spread	20	22	
Ave spread	Ave of 20 + 22	21	
Effect size	$(456-444) / 21$	<b>0.60</b>	

# Leadership...

Transformational

Instructional



# Transformational

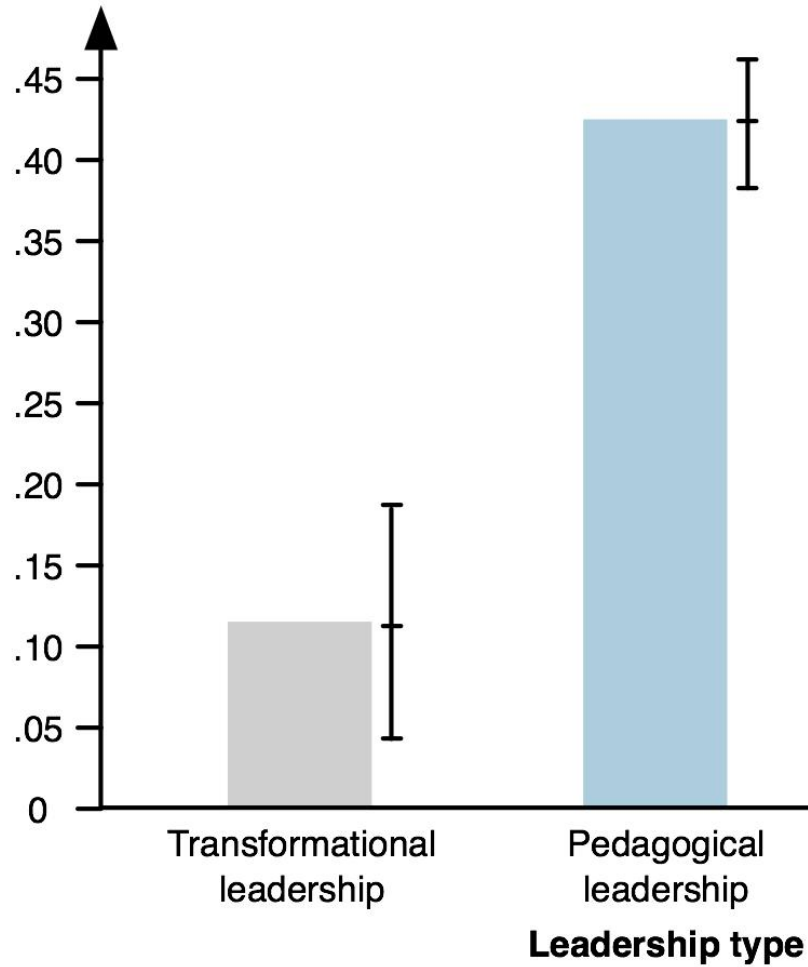
- Set the vision, school goals, the expectations
- Instructional support
- **Monitoring school activity**
- **Buffering staff from external demands**
- Ensures that staffing is fair and equitable
- Easily accessible to students and staff
- **Secures a high degree of autonomy for the staff**

# Instructional

- makes several formal classroom observations each year
- **interprets test scores with teachers**
- **Insists teachers collaborate the teaching program across grades**
- insists teachers expect high proportions of their students to do well on achievement outcomes
- insists and knows that class atmosphere in this school is generally very conducive to learning for all students.

# Remarkable!

Mean effect  
size estimate



# The Leader as Evaluator – Know thy impact

## A disposition to asking ...

- How do I know this is working?
- How can I compare 'this' with 'that'?
- What is the merit and worth of this influence on learning?
- What is the magnitude of the effect?
- What evidence would convince you that you are wrong?
- Where is the evidence that shows this is superior to other programs?
- Where have you seen this practice installed so that it produces effective results?
- Do I share a common conception of progress?

Rank	Influence	Studies	Effects	ES
1	Student expectations	209	305	1.44
3	Response to intervention	13	107	1.07
4	Teacher credibility	51	51	.90
5	Providing formative evaluation	30	78	.90
7	Classroom discussion	42	42	.82
10	Feedback	1310	2086	.75
12	Teacher-student relationships	229	1450	.72
25	Not labeling students	79	79	.61
48	Goals (Difficult vs. Do your best)	895	1111	.50



# Fullan's (2011) Failed Levers of Change

1. **accountability**: using test results, and teacher appraisal, to reward or punish teachers and schools vs. capacity building;
2. **individual teacher and leadership quality**: promoting individual vs. group solutions;
3. **technology**: investing in and assuming that the wonders of the digital world will carry the day vs. instruction;
4. **fragmented strategies** vs. integrated or systemic strategies.